

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**WOODLAND SITE PREPARATION  
(Number)  
CODE 490**

**DEFINITION**

Treating areas to encourage natural seeding of desirable trees or to permit reforestation by planting or direct seeding.

**PURPOSE**

To prepare land for establishing a stand of trees to conserve soil and water, improve watersheds, or to produce wood crops.

**WHERE APPLICABLE**

In understocked areas or in areas of undesirable vegetation where the soils are suited to growing trees for wood crops.

**PLANNING CONSIDERATIONS**

**Water Quantity**

This practice will not affect the water budget unless roads or trails are used by heavy equipment to remove woody materials. This activity could increase runoff.

Destruction of woody materials will increase the amount of water available to the remaining live woody materials.

**Water Quality**

The use of roads or trails by heavy equipment may increase sediment and soluble sediment attached substances carried by runoff.

Pesticides will increase on the surface and may infiltrate to the groundwater.

**SPECIFICATIONS GUIDE**

**General Rules.** Three conditions are necessary for regeneration of tree species. These are a good seed supply or good seedlings, a suitable seedbed, and minimum competition from undesirable vegetation.

Regeneration may be either by natural or artificial methods and the extent of site preparation for either varies with the site conditions.

**Species.** The selection of species will be affected by the product the landowner wishes to produce. Select species adapted to the planting site. Consult the current woodland suitability information in Section II-C in the Field Office Technical Guide for guidance.

**Methods of Site Preparation.** The main purpose of site preparation is to reduce competition from undesirable species. It can also be helpful in preparing the soil prior to natural seed dispersal of desired hardwood or conifer species. Specific methods of site preparation for natural regeneration or direct seeding are:

Grass Cover.

Mechanical. In heavy sod or dense grass cover, till furrows on the contour where seedlings are to be planted. This practice is usually done in the fall prior to planting the following spring. The furrows should be only 2 to 4 inches deep and a minimum of 3 feet wide.

Scalping of the sod can be utilized either in tree planting or direct seeding. For hand planting, remove the sod from within a 3 feet diameter and plant or seed in the center of the area. Some tree planters are equipped with scalping attachments and can be used for row plantings.

Chemical<sup>1</sup>. Application of approved chemicals in the spring before weeds and grasses emerge is a very effective site preparation tool. These compounds can be applied in strips 3 feet wide or spots 3 feet in diameter.

#### Tree and Woody Shrub Cover.

Mechanical. Cut woody vegetation and spray stumps with appropriate chemical.<sup>1</sup>

Chemical<sup>1</sup>. Foliage spraying or tree injection are very effective methods to reduce tree and shrub cover competition. Foliage spraying should be done 9 months prior to the planting or seeding time. Late spring and early summer are the most effective seasons for foliage spraying. Follow directions of the manufacturer when using a tree injector.

#### Cropland.

Deep tillage (ripping) may be necessary to break up a hard pan or plow layer. This should be done in the fall and then the site disced in the spring to improve planting conditions of the site.

Heavy soils may need to be tilled to improve the planting conditions. This tillage should be done in the fall with a light discing in the spring.

<sup>1</sup> Any herbicide recommended or used to control grass or woody materials must be federally and locally registered and must be applied strictly in accordance with registered uses, directions on the label, and other federal or state policies and requirements.